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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/707,782	11/07/2000	Kevin Rodgers	4447116-0001	9995

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WHITE & CASE LLP
PATENT DEPARTMENT
1155 AVENUE OF THE AMERICAS
NEW YORK, NY 10036

EXAMINER

DASS, HARISH T

ART UNIT	PAPER NUMBER
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3628

DATE MAILED: 02/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/707,782

Applicant(s)

RODGER ET AL

Examiner

Harish T Dass

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ME

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc. For example: Page 53 line 2 "In one embodiment", line 9 "Additionally" and line 12 "furthermore".

Claim Objections

2. Claim 12 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 11 is a product claim and claim 12 is directed to a method/process.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 6, 7, 12, and 37-49 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful,

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concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court

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found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

In the present application, Claims 6, 7, 11, 12, and 37-49 have no connection to the technological arts. None of the steps indicate any connection to a computer or

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technology. Therefore, the claims are directed towards non-statutory subject matter.

To overcome this rejection the Examiner recommends that Applicant amend the claims to better clarify which of the steps are being performed within the technological arts; for example: "computer is used to calculate average ..."

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 47-56 are rejected under 35 U.S.C. 102(e) as being anticipated by May (US 6,317,727).

Re. Claim 47, May discloses (a) compiling (collecting) a list of prices, each provided by one of a plurality of users, the prices comprising offers to sell and bids to buy an option contract for a financial instrument [see entire document particularly, C46 L43 to C47 L2; C12 L 1-43; C16 L45-L56; C36 L1-L3]; (b) polling one or more volatility surfaces corresponding to the option contract, the internal volatility surfaces each maintained by the one or more users [C2 L66 to C5 L37]; (c) adjusting the listing of the price (small

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price adjustment) for the option contract provided by each user, such that the adjusted price equals the price obtained from the user's volatility surface; and (d) communicating a notice of the adjustment to the user [C29 L11 to C30 L45].

Re. Claim 48, May discloses (a) determining a user's eligibility to trade on the system according to criteria, the criteria including creditworthiness [see entire document particularly, C26 L18-L67; C48 L42-L67]; (b) restricting the activities of the user on the system based on the user's eligibility [C48 L42-L67]; (c) receiving one or more offers to sell and bids to buy for currency option contracts from the user; and (d) requiring that acceptance of an offer to sell or a bid to buy by the user creates a binding contract [C29 L11 to C30 L17; C27 L43-L66].

Re. Claim 49, May discloses (a) providing a user a list of counterparties [see entire document particularly, C10 L35 to C11 L60]; (b) receiving from the user conditions that each counterparty must meet to deal with the user, the conditions including whether the counterparty accept a contract with the user, the maximum tenor the user will accept on contracts with the counterparty and the size of the option the user will accept with the counterparty [C3 L65 to C4 L5; C43 L15-L55]; and (c) displaying to the user the prices on option contracts from counterparties that meet that user's conditions for dealing [Fig. 16].

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Re. Claim 50, May discloses (a) accessing a network server of the electronic trading system using a web browser [Fig. 3; C13 L6-L15]; (b) receiving a display of a current market rate for each option contract in the series of tenors [C1 L35 to C2 L8]; (c) submitting desired prices for each option contract in the series of tenors to the electronic trading system [C41 L50 to C42 L20]; and (d) receiving a display of the volatility run submitted to the electronic trading system [Fig. C23].

Re. Claim 51, May discloses wherein the market rate for each bid is the current highest bid to buy the option contract at that tenor in the system and the market rate for each offer is the current lowest offer to sell the option contract at that tenor in the system C31 L47-L57].

Re. Claim 52, May discloses wherein the electronic trading system is for trading currency option contracts [Figures 5, 13; C16 L57 to C17 L22; C18 L61 to C19 L20].

Re. Claim 53, May discloses (a) submitting a price for an option contract to the network server; (b) submitting criteria for selecting counterparties corresponding to the price to the network server [Abstract; [Fig. 3; C13 L6-L15; C41 L50 to C42 L20]; (c) submitting a request to the network server that the price is made available to counterparties meeting the criteria; (d) receiving one or more responses to the price from the network server, each response from a counterparty meeting the criteria; and (e) dealing on the option contract with one or more responding counterparties [C1 L35 to C2 L40; C5 L40

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to C6 L42; C12 L 1-43; C18 L3 to C21 L55; 20 L3 ;C24 L45 to C26 L17; C35 L36-L52; C31 L47-L57; C36 L1-L3; C2 L66 to C5 L37] .

Re. Claims 54-55, May discloses wherein the criteria includes whether a counterparty is most active among all counterparties in a stated period of time for a class of traded instrument [C36 L63 to C37 L30], and wherein the class of traded instrument (swap) is a currency option contract for a particular currency pair [Fig. 16].

Re. Claim 56, May discloses (a) providing a request for an option contract on a financial instrument to the network server , [C12 L 1-43; C36 L1-L3; C13 L6-L15; C41 L50 to C42 L20]; (b) providing a second request for a communication of a lowest price on the option contract to the network server, wherein the lowest price is determined upon a comparison of one or more prices corresponding to the option contract, the one or more prices obtained by polling one or more volatility surfaces each maintained by a user; and (c) receiving the lowest price on the option contract from the network server [C42 L2-L23; Figures 22-23; C2 L66 to C5 L37; ; C13 L6-L15; C41 L50 to C42 L20].

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over May (US 6,317,727).

Re. Claims 11-14, May discloses (a) a volatility price corresponding to an option contract for each of a series of deltas and expiring every business day in the year following the date of the contribution, and (a) adjusting 50%-delta volatilities on the volatility surface to equal 50%-delta volatilities of the currently traded volatility run; and (b) adjusting volatilities for options whose deltas are not 50% to maintain the same relationship with the 50%-delta volatilities existing on the volatility surface prior to the adjustment [Fig. 23; C18 L3 to C21 L55; 20 L3 ;C24 L45 to C26 L17; C35 L36-L52]; and (b) a bid/offer spread [C20 L4; C38 L45-L60]. May, explicitly, does not disclose an option contract for each of a series of deltas. However, it would have been obvious at the time the invention was made to a person having ordinary skill in the art of to modify the disclosure of May (Black-Scholes) and determine set of delta values (expected exposure) and adjust the deltas for options to calculate range of RQs.

Claims 1-10, and 15-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over May in view of Korhammer et al (hereinafter Korhammer - US 6,278,982).

Re. Claims 1, 6 May discloses (a) a plurality of users and receiving a request for an option contract on a financial instrument, the request provided by one of a plurality of users [see entire document particularly, Abstract; Fig. 1, C12 L 1-43; C36 L1-L3]; (b)

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one or more volatility surfaces (autodealing), each maintained by a user [Figures 16-17, 22-23; C16 L45-L56] (c) a request for an option contract on a financial instrument, the request provided by a user [C16 L57-L67]; (d) a protocol (procedure) for polling the at least one or more volatility surfaces to obtain one or more prices corresponding to the requested option contract [Figures 22-23; C2 L66 to C5 L37]; and (f) a communication providing the highest bid to buy and lowest offer to sell to the user requesting the option contract [Figures 1-2; C11 L23-L67; C51 L63 to C52 L23; C].

May, explicitly, does not disclose (e) a protocol for determining the highest bid to buy and lowest offer to sell among the prices obtained. However, Korhammer discloses this step [C1 L35 to C2 L8; C8 47 to C9 L7; C10 L40-L49]. It would have been obvious at the time the invention was made to a person having ordinary skill in the art of option trading (market makers) to modify the disclosure of May and include the comparing (determining) bids/offers, as taught by Korhammer, to buy at lower price than best offer.

Re. Claims 2, 7 May, explicitly, does not disclose (a) a protocol for determining whether the highest bid to buy is higher than the lowest offer to sell; and (b) a protocol for preventing the user from trading on both the highest bid to buy and the lowest offer to sell if the highest bid to buy is higher than the lowest offer to sell (broker preference and less desirable order). However, Korhammer discloses these steps [Abstract; Figures 4, 7 # 401, #402; C1 L35 to C2 L8; C8 47 to C9 L7; C10 L40-L49]. It would have been obvious at the time the invention was made to a person having ordinary skill in the art of to modify the disclosure of May and include users defined preferences, as discloses by

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Korhammer, to allow the user (market maker) to buy at lower price than best selling price.

Re. Claims 3, 8 May discloses (a) a communication providing a notification that a user's volatility surface has changed and) receiving a notification that a user's internal volatility surface has changed [Fig. 1, fig. 2 # 18; C11 L52; C15 L67-L64; C50 L58 to C51 L15; C37 L15-L16]; (b) an indicative option contract having a price held by the system, the price comprising an offer to sell and a bid to buy [May - C34 L38-L67; C35 L36-L52]; (c) a protocol for polling the user's volatility surface to obtain a price for the indicative option contract [Figures 22-23; C2 L66 to C5 L37]; (d) a protocol for comparing the price of the indicative option contract obtained from the user's volatility surface to the price of the indicative option contract held by the system to determine whether a bid to buy the indicative option contract is higher than an offer to sell the indicative option contract [C1 L51-L63; C35 L34-L64]; and (e) a communication comprising a notification of arbitrage if a bid to buy the indicative option contract is higher than an offer to sell the indicative option contract [C11 L23-L67; C15 L67-L64; C50 L58 to C51 L15; C51 L63 to C52 L23].

Re. Claims 4-5, 9-10 May discloses wherein the indicative option contract has a tenor of one month to twelve months and wherein the option contract is a currency option contract [Figures 5, 13; C16 L57 to C17 L22; C18 L61 to C19 L20].

Re. Claims 15, 22, & 37 claims 15, 22 & 37 are parallel claims of claim 1 and rejected under same rational [see claim 1].

Re. Claim 16, May discloses wherein the currency options are for a currency pair, each of the currency pair selected from the group consisting of the following currencies: the Euro, the United States dollar, the Japanese yen, the British pound, the Swiss franc, the Australian dollar, the New Zealand dollar, the Canadian dollar, the Swedish krona, the Norwegian krone and the Greek drachma [C1 L35-L67; C20 L1-L67; C22 L56-L67].

Re. Claims 17-21, May discloses wherein a user may specify a spot-out corresponding to an offer or a bid entered by the user, and wherein a user may specify a time-out corresponding to an offer or a bid entered by the user, wherein the runs entered by the first tier users and the second tier users are volatility runs and wherein the option contracts are entered and displayed in units of volatility, and wherein the first tier users and the second tier users are required to periodically submit volatility runs [Abstract, C31 L47-L57; C12 L 1-43; C36 L1-L3; C2 L66 to C5 L37].

Re. Claims 23-26, May discloses wherein the system server operates a protocol permitting a user to provide credit criteria via the communication link specifying counterparties with which the user will deal, the protocol operating such that the user may access only offers to sell and bids to buy from the counterparties that meet the credit criteria, and wherein the credit criteria provided comprises a maximum deal amount, and wherein the runs entered by the first tier users and the second tier users are volatility runs, and wherein the options traded on the system have a tenor one week to one year [Abstract; C1 L35 to C2 L40; C5 L40 to C6 L42; C12 L 1-43; C18 L3 to C21

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L55; 20 L3 ;C24 L45 to C26 L17; C35 L36-L52; C31 L47-L57; C36 L1-L3; C2 L66 to C5 L37].

Re. Claim 27, May discloses wherein the options traded have a tenor selected from a group of tenors consisting of one week, one month, two months, three months, six months, nine months and one year [figures 8B, 9B, 13; C18 L59 to C19 L20].

Re. Claim 28, May discloses wherein the currency options are for a currency pair, each of the currency pair is selected from the group consisting of the following currencies: the Euro, the United States dollar, the Japanese yen, the British pound, the Swiss franc, the Australian dollar, the New Zealand dollar, the Canadian dollar, the Swedish krona, the Norwegian krone and the Greek drachma [C1 L35-L67; C20 L1-L67; C22 L56-L67].

Re. Claim 29-33, May discloses wherein the option contracts are entered and displayed in units of volatility, and wherein the first tier users (users) the second tier users (Users) can access a display of a volatility run, and wherein the display of the volatility run comprises a current market rate for each of the options in the volatility run until a volatility run is entered by a user, and wherein the first tier users are required to periodically submit volatility runs, and wherein the information transmitted to the parties of the completed system currency option contract includes a conversion of the cost of the contract from units of volatility into a monetary price [Fig. 23; C18 L3 to C21 L55; 20

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L3 ;C24 L45 to C26 L17; C35 L36-L52; C31 L47-L57; C12 L 1-43; C36 L1-L3; C2 L66 to C5 L37].

Re. Claims 34-36, May discloses (a) a quote for an offer to sell or a bid to buy an option contract provided by a user, wherein the option contract is a currency option contract, and (a) a quote for an offer to sell or a bid to buy an option contract provided by a user, the option contract for a currency pair having a current market price, and (b) a defined value for the currency pair provided by the user; (c) a current market price for the currency pair; (d) a protocol for comparing the user's defined value for the currency pair to the current market price for the currency pair; and (e) a protocol for withdrawing the user's quote if the user's defined value for the currency pair equals the current market price for the currency pair [Fig. 6A, 6B, ; C3 L65 to C4 L5; C43 L15-L55]. May, explicitly, does not disclose (b) a period of time provided by the user corresponding to the quote, and a protocol for withdrawing the quote upon expiration of the corresponding period of time. Korhammer discloses these steps (b) a period of time provided by the user corresponding to the quote; and (c) a protocol for withdrawing the quote upon expiration of the corresponding period of time [Fig. 8-9; Abstract; C2 L43 to C3 L33 to C4 L36; C12 L7-L39]. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the disclosure of, May and include quoting time and withdrawal, as discloses by Korhammer, to allow the user to select desirable transactions and try to take best offer (deal) in quickly moving market.

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Re. Claim 38, is/are parallel claim/claims of claim 23 and rejected under same rational.

Re. Claim 39, May discloses wherein the information transmitted concerning a completed transaction includes names of the parties to the completed transaction, tenor, volume of currency, price and date and time that the transaction was completed [C16 L35 to C16 L33].

Re. Claims 40-43, May discloses wherein the price is provided in units of volatility, and wherein the information concerning a completed transaction includes a price in volatility units and monetary units, and wherein the runs received from the first tier users (users) are volatility runs, and wherein the volatility runs are received periodically from each of the first tier users [Fig. 23; C18 L3 to C21 L55; 20 L3 ;C24 L45 to C26 L17; C35 L36-L52; C31 L47-L57; C12 L 1-43; C36 L1-L3; C2 L66 to C5 L37].

Re. Claims 44-46, claims 44-46 are parallel claims of Claims 34-36 and rejected under same rational.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 CFR ' 1.111 (c) to consider the references fully when responding to this action.

US 6,014,643 to Minton, Jan. 11, 2000 "Interactive securities trading system", this invention discloses data processing systems and networks of data processing systems, and more specifically to systems which allow individuals to trade securities directly with other individuals who are not brokers, specialist or market makers.

US 6,278,981 to Dembo et al, August 21, 2001 "Computer-implemented method and apparatus for portfolio compression", this invention discloses a field of data processing, and in particular to a computer-implemented method and apparatus for compressing a portfolio of financial instruments to enable, for example, more efficient risk management processing than is otherwise achievable with an uncompressed portfolio, and risk management, and relatively-complex mathematical calculations necessary to accurately measure risk, and computer-implemented "risk management engine." to adequately deal with the large, complex portfolios maintained by many financial institutions.

US 6,292,787 to Scott et al, September 18, 2001 "Enhancing utility and diversifying model risk in a portfolio optimization framework", this invention discloses a field of financial advisory services. More particularly, the invention relates to a portfolio optimization process that diversifies model risk by favoring a more diversified portfolio over other portfolios with similar characteristics.

US 6,390,472 to Vinarsky, May 21, 2002 "Pseudo-commodities interactive futures trading game", this invention discloses a trading game comprised of a clearing house setting up specific contracts defined as issues each having no innate financial value but of local, national or international interest and involving social, financial, business, political, sports, or general, etc. matters that can be influenced by the actual or potential occurrence of different events or factors.

US 6,321,212 to Lange, Nov. 20, 2001 "Financial products having a demand-based, adjustable return, and trading exchange therefor", this invention discloses systems and methods for demand-based trading. More specifically, this invention relates to methods and systems for trading financial products having demand-based adjustable returns, and systems and methods for determining those returns.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harish T Dass whose telephone number is 703-305-4694. The examiner can normally be reached on 8:00 AM to 4:50 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung S Sough can be reached on 703-308-0505. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Harish T Dass *HTD*
Examiner
Art Unit 3628

2/13/04


HYUNG SOUGH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600